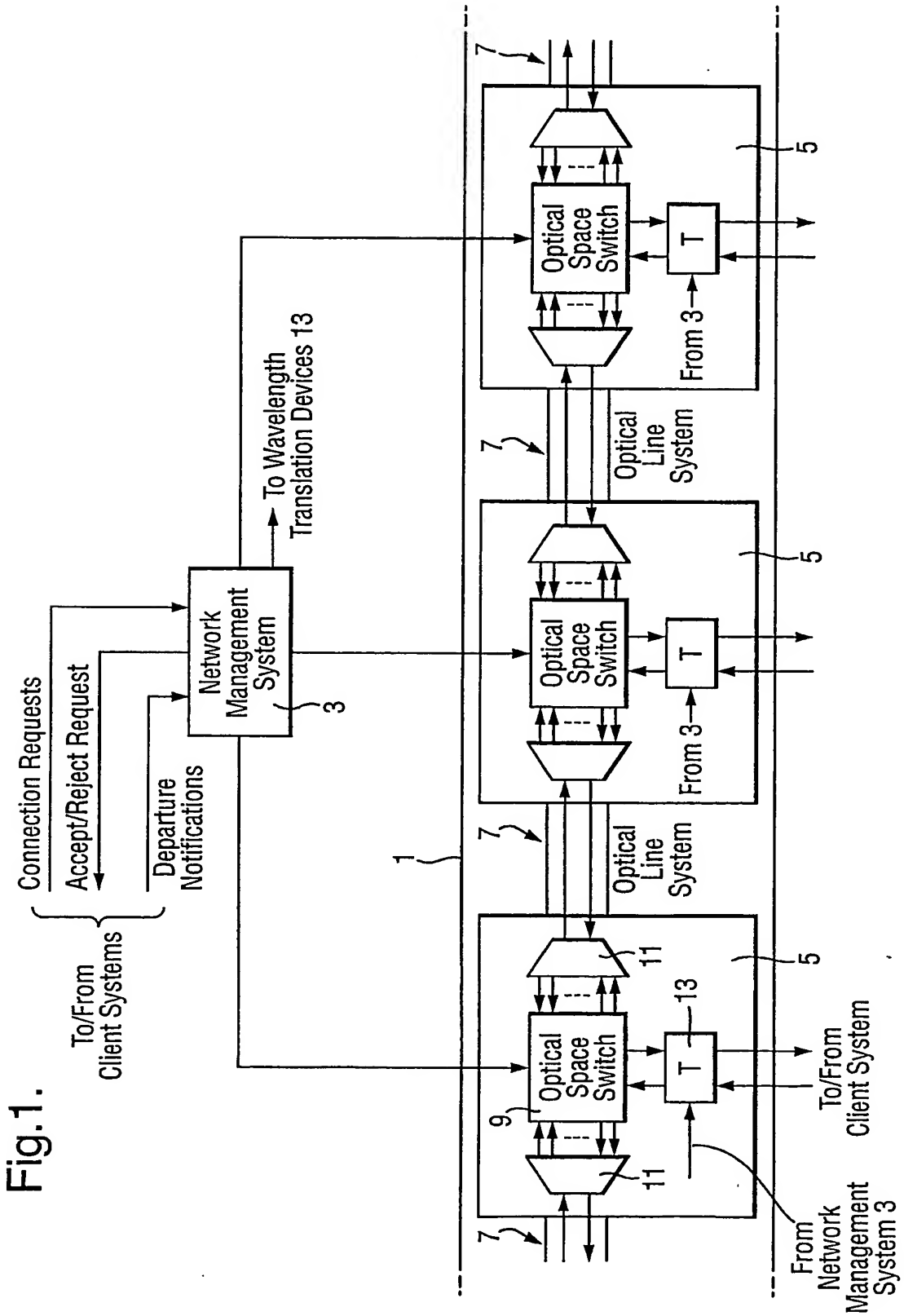

Connection Requests
Accept/Reject Request
Departure Notifications
To/From Client Systems
Network Management System
3
To Wavelength Translation Devices 13
1
7
5
Optical Space Switch
T
From 3
Optical Line System
11
13
9
To/From Client System
From Network Management System 3

Fig.1.

Fig.2.

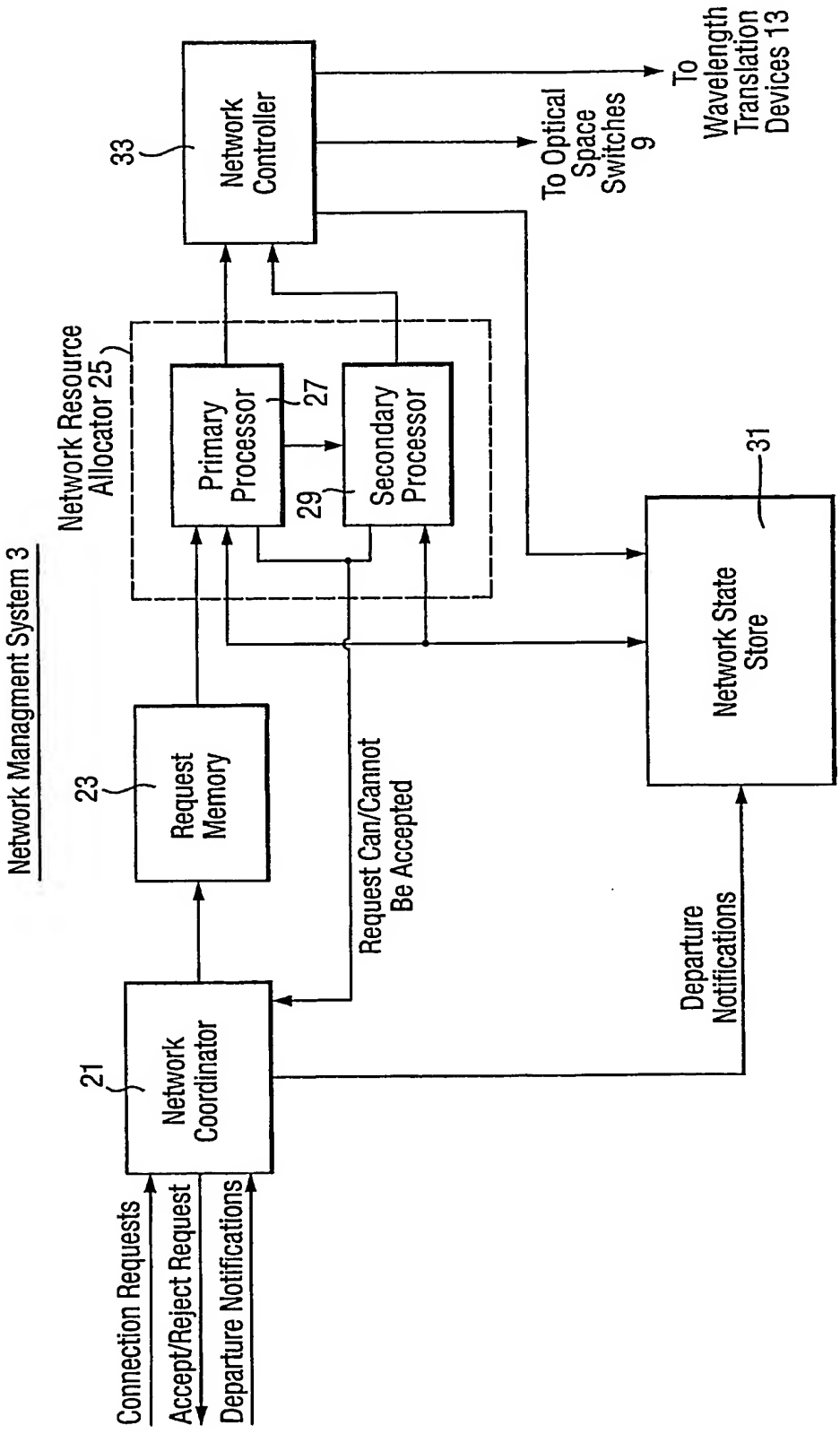

Network Managment System 3
Network Resource Allocator 25
Primary Processor
27
29
Secondary Processor
33
Network Controller
To Optical Space Switches 9
To Wavelength Translation Devices 13
31
Network State Store
23
Request Memory
Request Can/Cannot Be Accepted
Departure Notifications
21
Network Coordinator
Connection Requests
Accept/Reject Request
Departure Notifications

Fig.3.

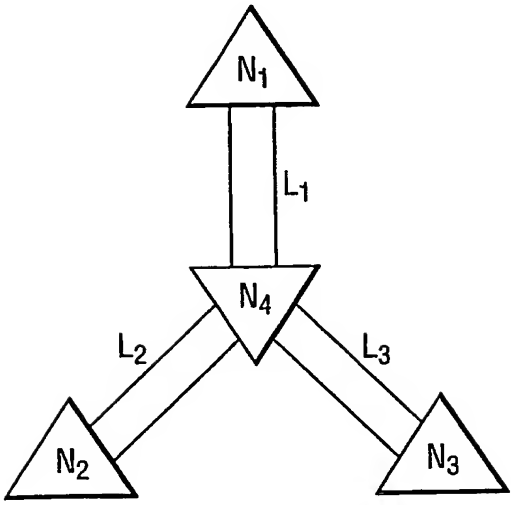
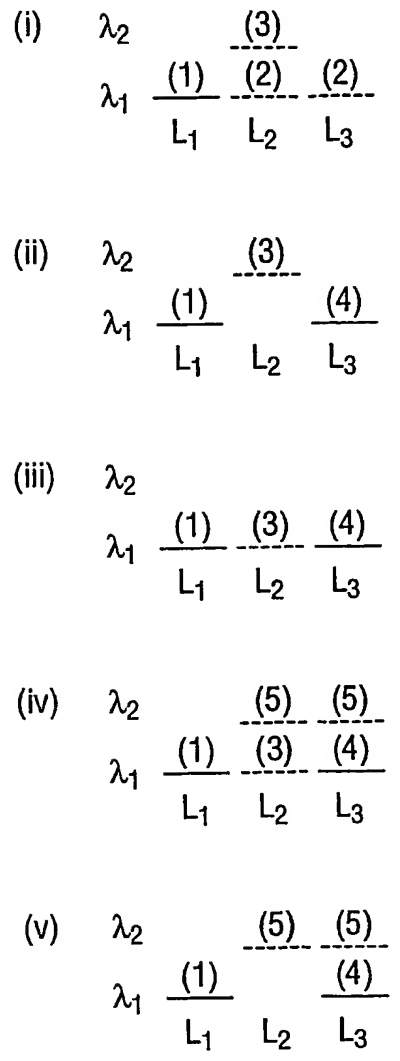

N1
L1
N4
L2
L3
N2
N3

Fig.4.


(i)
λ2
(3)
λ1
(1)
(2)
(2)
L1
L2
L3
(ii)
λ2
(3)
λ1
(1)
(4)
L1
L2
L3
(iii)
λ2
λ1
(1)
(3)
(4)
L1
L2
L3
(iv)
λ2
(5)
(5)
λ1
(1)
(3)
(4)
L1
L2
L3
(v)
λ2
(5)
(5)
λ1
(1)
(4)
L1
L2
L3

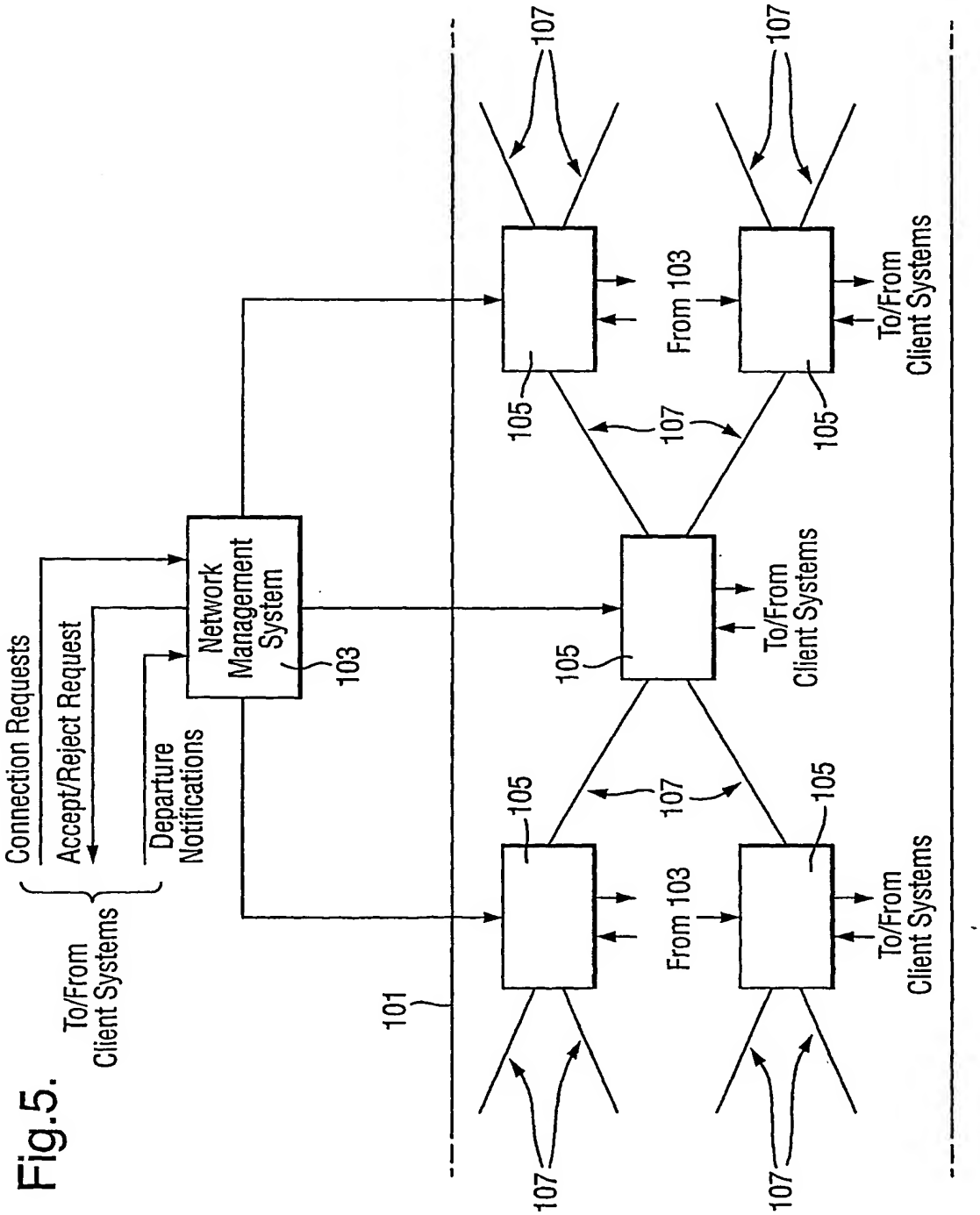

Connection Requests
Accept/Reject Request
Departure Notifications
To/From Client Systems
Network Management System
103
101
105
107
From 103
To/From Client Systems

Fig.5.

Fig.6.

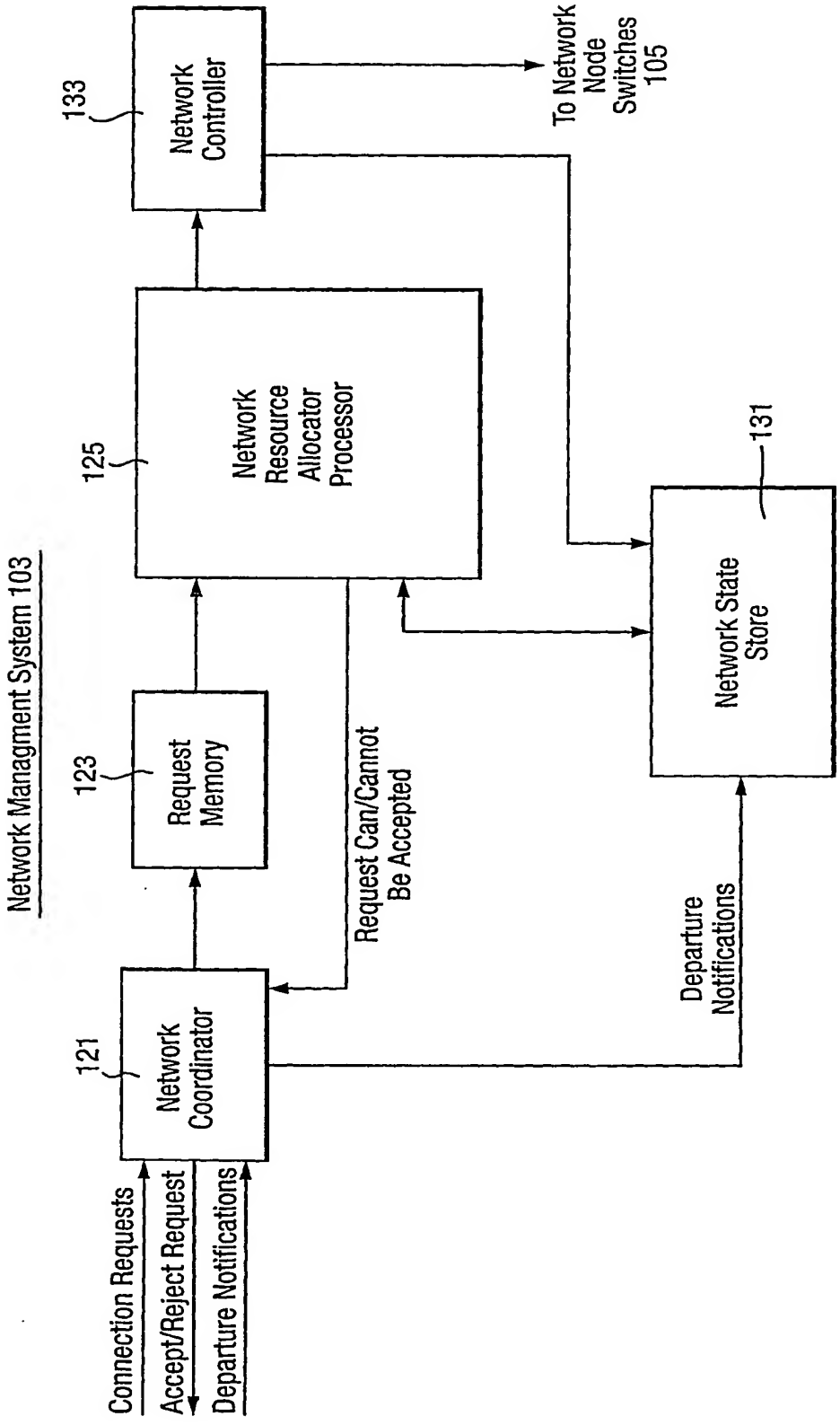
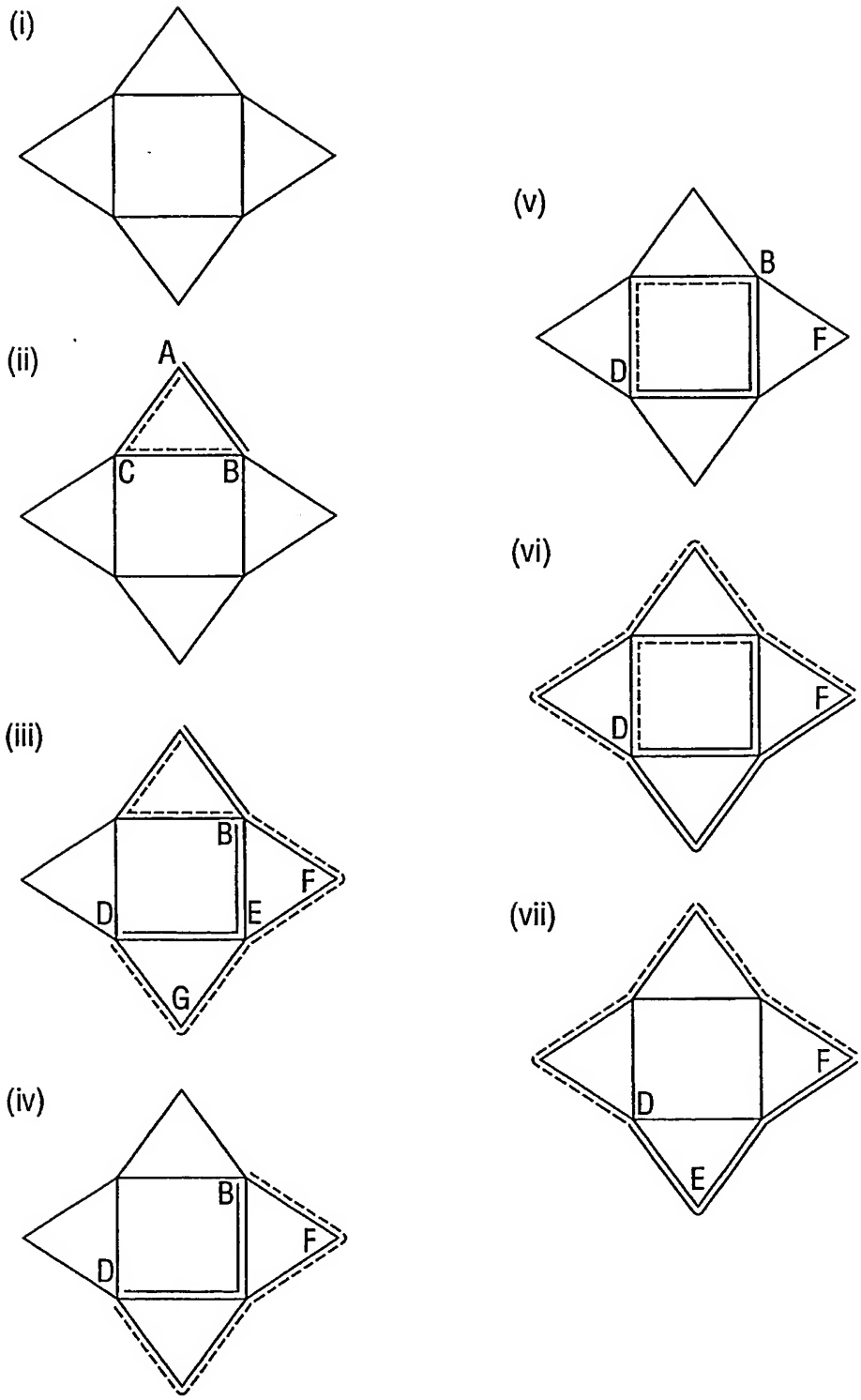

Network Managment System 103
Network Controller
133
To Network Node Switches 105
Network Resource Allocator Processor
125
131
Network State Store
Request Memory
123
Request Can/Cannot Be Accepted
Departure Notifications
Network Coordinator
121
Connection Requests
Accept/Reject Request
Departure Notifications

Fig.7.



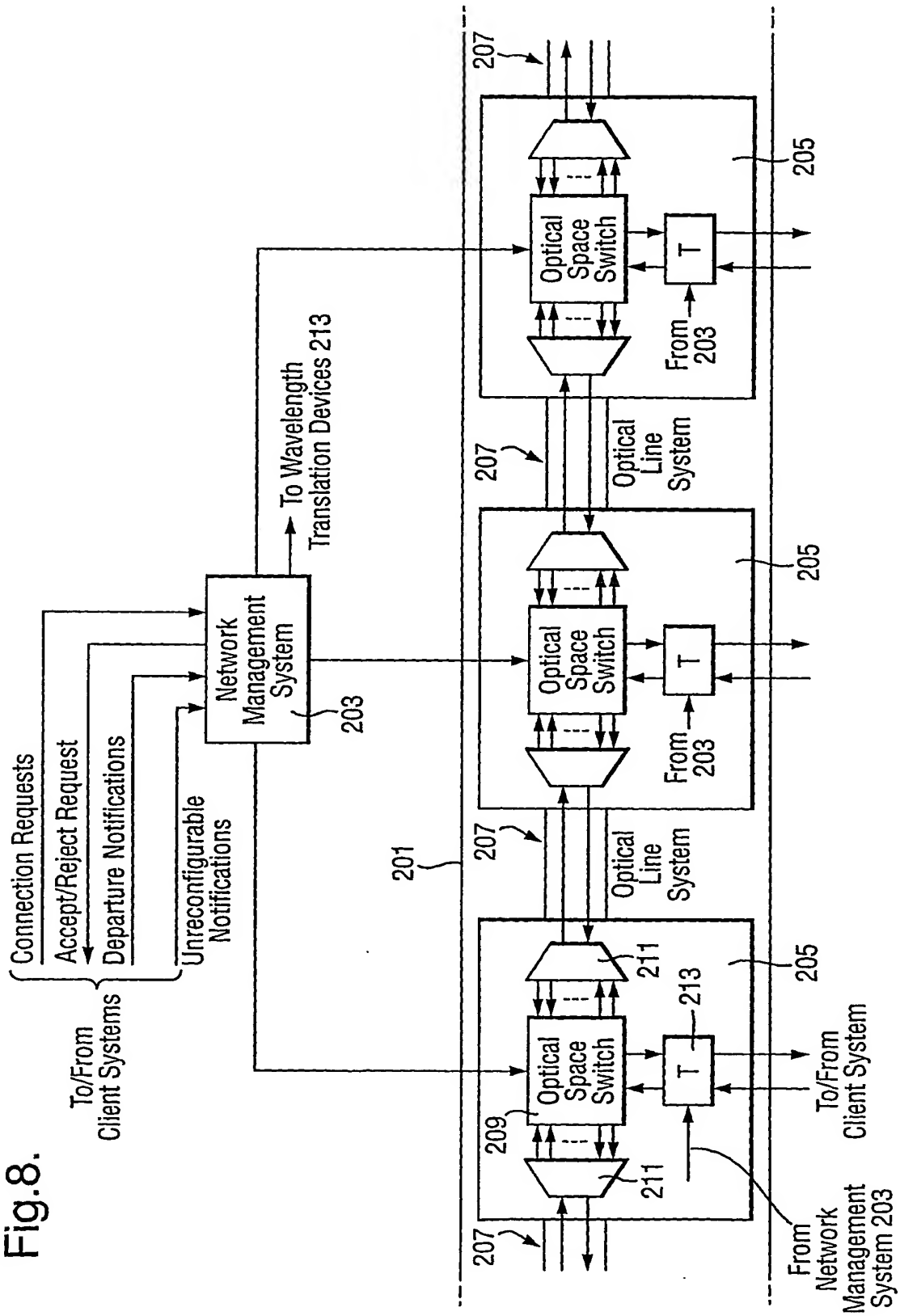

Connection Requests
Accept/Reject Request
Departure Notifications
Unreconfigurable Notifications
To/From Client Systems
Network Management System
203
To Wavelength Translation Devices 213
201
207
205
Optical Space Switch
T
From 203
Optical Line System
211
213
209
To/From Client System
From Network Management System 203

Fig.8.

Fig.10.

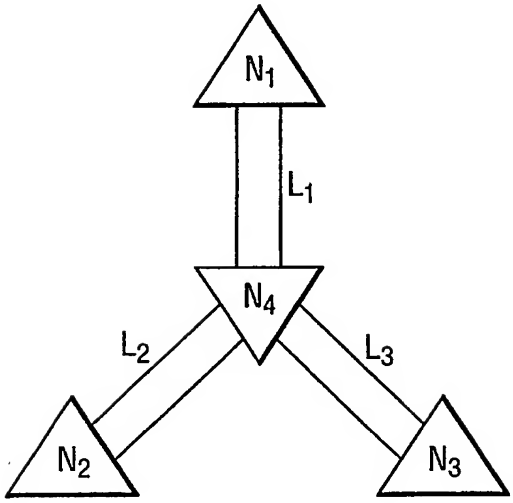


Fig.11.

(i)

λ_2		(3)	
λ_1	(1)	(2)	(2)
	L_1	L_2	L_3

(ii)

λ_2		(3)	
λ_1	(1)		(4)
	L_1	L_2	L_3

(iii)

λ_2			
λ_1	(1)	(3)	(4)
	L_1	L_2	L_3

(iv)

λ_2		(5)	(5)
λ_1	(1)	(3)	(4)
	L_1	L_2	L_3

(v)

λ_2		(5)	(5)
λ_1	(1)		(4)
	L_1	L_2	L_3